

Horse Matters.

For the Michigan Farmer.
THE HORSE OF THE PERIOD AND THE COMING HORSE.

The horse of the period is anything that "will sell," and owing to a short supply and an increased demand anything will sell that is big and fat, no matter by what system of breeding, or what course of feeding and fitting he has been produced; and the sooner he is used up, the sooner another is required and the better it is for the middle man, who has everything to gain and nothing to lose; but not so with the producer, he has a reputation at stake, although some are so blind to their own interest that they can not see it. But it is "a long road that has no turn," and therefore the shrewd farmer and breeder will turn his attention to the

COMING HORSE.

the hard times horse, the horse that will sell most readily and at best figures when the country becomes well supplied, and the consumer begins to distinguish between breeds; between the large fat hubber that falls to pieces before the end of six months of hard labor, and the close knit, hard muscled, strong boned little giant, indicating in every bone and sinew, every look and motion, that he is not only a good looker but a good doer; the horse that will go against his collar in the morning with a vim, last the day out and be a good horse at night.

In the trotting and running classes Americans have made wonderful progress in the last 50 years, but in the more useful and practical classes of general purpose and draft we have accomplished but little, although large sums of money have been expended in printers' ink and imported stallions during the past ten years. The reason is that a very large proportion of western farmers and breeders have gone at the work blind, or at best with only one eye open, and that to the one qualification of weight of the stallion used.

The machinist knows he must comply with certain natural laws or the locomotive will be completely worthless, and the same is true in the animal creation, certain rules and principles must be followed if we would have the subject anything approaching perfection. If our native horses are lacking in size we must have recourse to a breed superior in that respect, but we must see to it that the weight is so distributed and the parts adjusted as to give the best mechanical results; but little attention has been paid to this, however, by the majority of breeders of late. In their haste to raise "big horses" they have allowed themselves to be gulled by glib tongued men into the use of stallions weighing 1,800 and even 2,000 pounds, with long backs, weak loins, short quarters and ribs, but loaded with fat to purposely cover the defects, and supported by small round legs, hardly sufficient for a horse of 1,000 or 1,200 pounds, and what is the result? simply what we might expect with half a moment's reflection. The breeder started out with view to raise a "big" horse; he patronized an imported stallion; the crafty owner offers a prize for the best foal, which means the largest, and the foal is forced and fitted for the show. He gets through the first winter in fair condition, and possibly the second, but "like has produced like," and at two years old the defects of the sire begin to be apparent, and a heavy coat of flesh must be put on to cover up, and as he was raised "to sell," the sooner he can be turned off the better, and like the rest of the steers (?) he is well fed, but the load is too much for his small spongy legs, and before he is fit for the collar he has made a splendid growth of big spavins and thoroughbumps, but he is "big and will sell," and off he goes to eastern markets to make a name for western horses.

Thousands of farmers will realize during the next ten years that they have not only made no progress in improving their horse stock, but have engorged characteristics on their mares that will take years of judicious breeding to eradicate.

If we would learn any science or art we must go to those who have made that science or art a study and a success. No other nation in the world has made stock breeding in all its branches so close a study and raised it to so high a standard as England, and those of us who have visited that country have admired their elegant and perfectly formed horses, each one bred for and suited to a particular purpose. It has been the aim of English breeders for generations to so adjust the parts and proportions of their horses as to render every ounce of weight available, and to infuse the structure with energy and will power to exert those parts to their utmost capacity; and so eminently successful have they been that the fame of the English horses is world wide, and wherever they have been engorged on other breeds they have invariably stamped those characteristics on their offspring. For the production of strong, powerful, all purpose and draft horses, of indomitable pluck and hardy constitution, the English draft horse stands without a peer. His well balanced form and fine finish has long enabled him to stand at the head of the show ring in all Europe, and the deserving name of the handsomest "big horse" in the world, with his purity and strength of blood and his unequalled success wherever tried in the United States, marks him as the coming horse in the minds of those who know him best.

The Horse of the Prairie.

A young farmer came galloping over the prairie to while we trotted along. Now, if you have never seen the horse on the prairie, you have never seen him at all. He belongs there. Until you see him in his home you can never realize how tame a picture he makes curving in the streets of a city, or prancing through the thronged drives of a park. But out here—the day is full of sunshine, the air of December is bracing and pure, and on these plains it is exhilarating as champagne. As far out on the pale, brown prairie as you can distinguish objects you can see the moving speck on the horizon, and watch it coming into

clearer view as you see a ship sail in the sight at sea. The figure of the man and horse seem one; the motion of the easy gallop is regular as music, rising and falling in perfect cadence.

As they come nearer, the figure of the horse, perfect in outline and graceful in every movement, the long, tossing mane, the easy seat of the rider, riding with straight knees and long stirrups, and, by-and-by, the muffled flutter, rather than clatter, of the hoofs on the turf, and the roll of and around all this the background of a far-reaching prairie, dimpling in all shades of brown, and the setting of a sky blue as turquoise, with the wide, wild sense of perfect freedom, universe in sight, make a picture that you never want to forget, and could not forget if you would. We all wanted to shout as the rider galloped up, and, with a cheery "Hello!" to our driver, went swinging on. I have seen beautiful saddle-horses in Fairmount Park; I have watched riders in Central Park pounding their saddles with the trip-hammer ease of the English riding school; I have seen the "flyers" and their wonderful jockeys, throwing the miles away like so many seconds in Jerome; I have an armful of cavalry sweep across the battle field, while the ground fair'y rocked and trembled under their charging feet; I have watched, thrilled with excitement, a six-gun battery go wheeling and thundering into position in the face of a charging column at a time when minutes meant hours; but I think I never saw the horse when he seemed so much a part of the landscape; when all the beauty and freedom of earth and air and sky seemed to be made to harmonize with him, his strength and beauty and grace, until I watched him sweeping over the great sky-encircled prairies of the West.—*Burdette.*

The Farm.**The Farmer's Relation to Science.**

Prof. W. H. Jordan, one of the faculty of the Pennsylvania State Agricultural College, has written a paper in which he clearly shows the relation which science bears to agriculture as a means necessary but not infallible, to the end. We make the following extract for the benefit of those who expect our own agricultural college to furnish the "recipe for productivity" mentioned:

"It is often that the agricultural chemist or teacher of agricultural science is asked by a farmer to state just what he should do with his land or animals, in order that profitable results may follow. These requests are often not so much a call for information as they are an expressed desire to obtain a rule, recipe or formula that shall be an infallible guide to all future operations. A trustee of an agricultural college once said to the professor of Agriculture: 'What we wish you to do is to tell us just what we must put on our farms in order that we may get big crops,' meaning that there must be some way, known or unknown, by which all soils could be made productive to the desired extent.

"Many farmers seem to be living in the expectation that a series of facts are to be discovered, and a code of rules formulated that will constitute their guide book, which will relieve them of the inconvenience of facing difficult and disagreeable problems. To be sure, some pretend to distrust science, and say that the farmer must depend on himself alone; but such distrust arises in many cases from the fact that science has not helped them out of all the hard places, so that they still have difficulties.

"This stationary condition of expectancy, waiting for the scientist to dig out the *summum bonum* of agricultural knowledge, which can be used as the housewife uses a recipe for bread making, has been of harm to the progress of agriculture. It does not seem probable that agricultural practice will admit of very many universally best methods. At least such is not the case now, and farmers need to be more fully impressed with the fact. The main operations of the farm can only by chance allow the profitable use of the same details of practice in A's case that would be wise in B's, neither is it the business of science to provide a creed of farm practice that shall contain anything beyond great underlying principles. The determination of almost all the rules of practice best adapted to a farmer's particular circumstances rests with the farmer himself. We would, if possible, place the matter in such a light as to more sharply define the relation which the farmer's own observation and knowledge on the one hand, and the generalizations of science on the other, bear to the sphere of individual effort.

"Science teaches principles only. The rule for action is the outcome of the application of principles to the conditions of practice. Chemistry teaches that lime transforms and decomposes, and what its action is under particular circumstances, but it is left with each individual to decide when and where to apply lime in his farm practice. Chemistry teaches that superphosphates furnish plant food, but this is only shown that they can be used when needed. Not every farm may respond profitably to their use. Chemical analysis decides as to the relative composition and value of cotton-seed meal, but each dairyman is left to economically combine it with his other cattle foods, although he may have certain established principles to aid him in producing such combinations.

"In every agricultural problem there is the science side and the farmer side, the latter being often the more difficult. The farmer stands between principles on the one hand, and the conditions of his farming on the other, and of the proper application of principles to conditions comes correct practice. Other things being equal, then, the farmer, who has the best knowledge of principles, has the best practice—in other words, the educated farmer may be the best farmer. It would be convenient if agricultural practice could be so simplified as to render unnecessary any special study or preparation on the part of the tillers of the soil. We should then be sure of maximum good results, even from the ignorant ones. Farmers are apt to boast of the good sense and sterling quali-

ties of their class, and they seem to think that because of these things they deserve success. But no matter how much we may admire the citizen and the man, if he does not possess a certain kind of knowledge especially adapted to his wants, he will surely pay the penalty for such deficiency. Men labor science for its mistakes, and its inability to do certain things, but they must remember that neither now nor at any other time can science stand in the place which the farmer fails to occupy; nor can secure the best results only through the medium of a mind fitted to comprehend its teachings. This, then, is equivalent to saying that farming is not an occupation especially for the unlettered and those of low capacity, and, moreover, that there are to-day tillers of the soil who are but bunglers, and for whom science has few benefits. Fertilizer formulas, or any formulas designed for the use of those who cannot find out their own needs, are but sorry makeshifts, and are only the outcome of necessity, a necessity based on ignorance. The farmer must discover and decide some things for himself, or, in case of a failure to do this, pay a costly penalty."

The Value of Ashes.

The N. Y. Times contains a lengthy article on the use of ashes in farm economy, from which we make the following extract:

"In considering the fertilizing value of ashes it should be remembered that the elements contained in them are in an organic state, being the remains of organic matter, and that they are therefore more available as plant food than so much mineral would be. The potash, lime, and phosphoric acid contained in them are in the same condition as these are found in perfectly decomposed manure, for although the wood has been burned and the manure only rotted, yet the process of decomposition in either case is the same, and varies only in degree, for rotting is merely a slow combustion while burning is a rapid decomposition. Heat is given off in both cases; the volatile and gaseous portions are driven off in both cases and only the mineral matter is left. This fact will go very far to explain the active effect of ashes upon vegetation and crops which is usually noted.

"As to the fertilizing elements of ashes, we may regard these as confined chiefly to the potash, lime, and phosphoric acid, and it is difficult to perceive to which of these the useful effect exerted by them is due. Thousands of tons of leached wood ashes are used every year by farmers with satisfactory results, and yet they contain only 50 pounds of potash to the ton, and this is worth about \$3. This is but one-fourth the quantity contained in unleached ashes, and yet the ordinary salable value of leached ashes is about half that of the unleached. This is one point to be noted. It is also seen that the loss occasioned by leaching is chiefly of potash, the lime and the phosphoric acid remaining nearly intact. But lime and phosphoric acid are as essential to plant growth as potash. The former exists in all plants to a much greater extent than potash does, and in some soils available lime is greatly deficient. Indeed, it is pretty certain that the absence of lime in an available and soluble condition is much more general than we have supposed, and that this is what is the matter with a great many soils when the real cause is not suspected. And yet there is a strong popular prejudice against the use of lime, based upon the idea that it tends to exhaust the soil. Of all the erroneous current ideas upon agricultural subjects this seems to be the most misleading and baseless; for how can a soil be exhausted by the addition to it of the chiefest mineral ingredient of plant substance? So that, in fact the notable effect of ashes upon soils and crops may be, and is, doubtless, due in a large measure to the lime contained in them, and in a less measure to the phosphoric acid. We are too apt to consider that soils are always well supplied with lime. In one sense this is true of certain soils, but it is far from being always true. Light soils consisting chiefly of sand derived from granite and trap rocks are far richer in potash than in lime, for in some of these rocks potash forms one-eighth of their substance, and there may be a thousand tons of potash in every acre of the soil within reach of the roots of a wheat or grass crop. And yet crops are starved for want of potash in those very soils, or we think they are, and we apply ashes at the rate of a ton to the acre to supply the supposed need. Then when we see the grass, wheat, or corn luxuriating in the abundant foods we credit the effect to the potash of the ashes, and we have applied but 50 pounds per acre of it. Now, it is more reasonable to believe that this effect is due to the lime in the ashes, Basswood ashes are three times richer in potash than those of birch and oak. Elms ashes are also exceptionally rich in potash. This fact is well known to the potash-makers in the woods, who frequently find in the ashes of elm and basswood large pieces of solid crude potash which have been melted in the fire and run together in a mass. This is never experienced with other woods, and at a potashery the ashes of these woods are held to be worth more than those of others. So, too, the general opinion as to the worthlessness of pine ashes not sustained by facts, as these are not much inferior to hard-wood ashes. The inferiority of pine and other soft-wood ashes consists in the small quantity of ashes yielded rather than in the quality of the ashes themselves. But when one is purchasing ashes and can learn of what kinds of timber they have been made, he can apply them to his soil with better economy than if he is ignorant of their origin.

"A good deal has been said about the value of coal ashes as a fertilizer. The composition of these ashes gives me promise of any beneficial effect from their use. Yet their mechanical effect upon the soil may be useful in many cases, and this

is of more importance than might appear at first sight. For the action of the atmosphere and the nitrification of organic matter in the soil depend greatly upon the porosity of the soil, while the retentive power of a light soil is much enlarged by an increase of its compactness. A clay soil is made more porous and open, and a sandy soil is made more compact, by a dressing of coal ashes. To this extent coal ashes are useful, and the value of the benefit will be the full measure of the money value of them."

Farming on Clay Soil.

A Peoria County (Ills.) farmer writes the *Prairie Farmer*, respecting the crops which will do well on clay soil, as follows:

"Clay soil is not the most productive soil in the world, and if cared for properly is not the poorest; but in our part of the country many clay farms are owned and tilled by a non-reading class of farmers, and the result is doubly disastrous. 1st. In most cases poor crops are produced, poor hogs and cattle are raised, and the owners of such farms are always in reduced circumstances. 2nd. By raising such crops the land deteriorates in value, and such farms soon are denounced as being worn out and worthless, and many are led to regard all clay land as worth but little. Now I farm clay land, and I can raise as much of many crops on a given amount of land as can be raised on the fertile prairie land; and of some crops I can raise more.

"This may seem to some to be a very broad assertion, nevertheless it is true. I have never found any soil that would produce as good a quality, nor more in quantity, of Irish potatoes as clay soil, and I have raised potatoes more years on the prairie than I ever did on clay soil, and I find a more ready sale for my potatoes in Peoria raised on clay soil than I ever did for those which I raised on the prairie soil. To be sure, I use some fertilizers, but I get paid double for every cent laid out in manures. My corn does not yield quite as many bushels per acre as on rich soils, but it is of a much better quality than any corn I ever raised on the prairie, or ever saw raised there, from the fact that it is much more solid and weighs more. I can raise, and do raise, from twenty-five to forty bushels per acre, and have seen fifty bushels per acre raised on an old clay farm near me that had borne the name of being worn out for fifteen years. Corn can be raised here without paying out a cent for manures, by changing the land to oats or rye, or by seeding to grass and breaking up. Excellent hay is produced on clay soil, and a very fair yield, ranging from one to two tons per acre, according to the season; and when grass land is broken up and planted to corn, you may be sure of fifty bushels per acre, the season being favorable and the cultivation ample.

"Fall wheat does remarkably well on our soil; better than I have seen produced on any other, often yielding as much as forty bushels per acre, and of good quality. This year I have raised fifteen bushels of oats on an old farm near me, which yielded an average of thirty-five bushels per acre. I had ninety square rods planted to potatoes, from which I dug sixty-one bushels of potatoes, fifty-one bushels of which were large enough for market, and were worth \$1.25 per bushel. My corn mostly was new or breaking, and the yield was shortened by the extreme dry weather."

Berkshires.

The seventh annual meeting of the American Berkshire Association was held recently, and C. F. Mills and P. M. Springer, both of Springfield, Ill., elected president and secretary, and H. L. Sandford, of Elkhart, treasurer. Volume V. of the American Berkshire Record was reported ready for the press, and it is to be published at once. The committee on pedigrees reported a large number ready for the next volume, and also a number of importations during the year, some of which are not yet admissible, owing to failure of the importers to secure from English breeders pedigrees showing the required number of crosses. When satisfactory pedigrees accompany application for registry, the association has not hesitated to accept them, but the mere fact of importation is allowed no weight in their favor when the rules of the association regarding crosses are not complied with. The committee recommends that in future no animals be admitted except those tracing to recorded stock. The report was adopted, with the exception of the last mentioned suggestion, which was held for further consideration.

Agricultural Items.

Prof. Cook, of the Agricultural College, says that the moths of the corn worm, *Heliothis Arniaria*, were as numerous at Lansing last fall as the common cabbage butterfly, appearing upon flowers in the heat of the day as well as flying by night.

The report of the Commissioner of Agriculture for the year beginning July 1, 1880, to June 30, 1881, shows that 1,878,773 packages of seeds were distributed from the Capitol, of which 1,068,950 went to Congressmen. The total quantity of field seeds was 9,400 bushels, of which 3,640 were wheat.

The blue appearance which milk sometimes presents after standing a few days, is due to an organism which is allied to bacteria, and can be transplanted into other samples of milk and various solutions. It thrives according to the proportion of acid present and the condition of the casein; it appears after a certain degree of calcification has taken place, and prevents the further formation of acid. The casein must also be unchanged; it is then held in solution during the bluing process. The bluing occurs only in presence of oxygen, and is attended with evolution of carbonic anhydride.

There are plantations of timber on the Rhine and in other parts of Europe, that yield a rich harvest every 15 years. These are managed on the coppice system, and chiefly for the production of firewood, charcoal and tanining material, and for use in the arts requiring small pieces of wood. Other plantations are utilized in periods of greater length, extending to 50 or 60 years, when the harvest yields proportionately higher returns; while again there are species of still greater value, that require longer periods to bring to perfection.

For more than twenty years past, a farm has been run in Germany, by the use of purchased fertilizers solely. Forage crops are grown and fed to animals, and the manure sold to market gardeners at a paying price. The chief business of the farm has been the manufacture of manure to sell. As gardeners require heating manure for their hot-beds, and to force growth early in the spring, while the weather is cold, it will be seen that stable manure might be worth more to them than to the ordinary farmer who grows grass or grain crops in their natural season. This is the first farm run as a manufactory we have heard of.

The Ohio Farmer predicts, in reply to a correspondent who fears the butter market is going to be affected by the number who will devote themselves to dairying: "Ohio will have to make fifty-seven million pounds of creamery, or gilt-edged butter, before she could even substitute the latter for dairy butter. This would require about 600 creameries to be immediately erected, and each manufacture 100,000 pounds of butter next year. By the time these 600 butter factories are going, this country will require a billion and a half pounds of butter to supply the home demand, and we will want one hundred million pounds to ship to Europe, Brazil and China. And lastly, when ten years more have been added to the calendar only 'bouquet flavored' dairy butter can be sold at all, and the result will be that butter will be made at creameries, an article of uniform grade, higher price, and yet greater demand.

An Idea.

And a very sound one too, many people have, that dosing with quinine is harmful. Eminent medical authorities condemn it, and experience has proven its use to be entirely unnecessary; for that infallible Ague Cure and Antipreddie, INGRAM'S AGUE PILLS, are a never failing remedy for all Malaria Diseases. They are the only reliable substitute known for Quinine and the only Ague Medicine that a druggist will warrant to cure.

"This may seem to some to be a very broad assertion, nevertheless it is true. I have never found any soil that would hold its own against the use of quinine, and I have raised more than 100 bushels of corn on clay soil than I ever did for those which I raised on the prairie soil, and I find a more ready sale for my potatoes in Peoria raised on clay soil than I ever did for those which I raised on the prairie soil.

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THE MICHIGAN FARMER.

Horticultural.

VARIETIES OF FRUITS ADAPTED
TO CHICAGO MARKETS.

[A paper read by Mr. Thomas Mason of Chicago at the summer meeting of the State Horticultural Society at Benton Harbor, in June last.]

In accepting your invitation, it is with a conviction of my inability to do the subject assigned me justice; but nevertheless I feel it my duty as a member of this society to contribute my mite to the general experience fund, as derived from personal observation with the different varieties of fruits in their adaptability to the requirements of our Chicago or more distant markets. Therefore, I trust my pugnacious friends will not feel dismayed that I do not regard their preference with the same favor—my selection being governed chiefly by their commercial value. I do not propose to go through the list of varieties, giving their distinct qualities or season, but rather name a few varieties as characteristic of the wants of our market, thereby aiding you to decide what we shall "plant for profit." The chief requisites in all fruit for market purposes are firmness, color, quality and size in the order named. Let me open with the apple. A bright red is the most popular color; hence, Steele's Red, Willow Sap, Willow Twig, Jonathan, Baldwin, even the Ben Davis, is preferred to a better apple of a poor, dull or rusty color. Take the Baldwin, when it is of a bright color, it will sell at 50 per cent better price on the same date than when it is shown of a dull color. There are many points to be considered in relation to the profitslessness of certain varieties, even when the best quality in them is present. The Wilson, which our Michigan fruit-growers should consider. Take the Red Astrachan, for instance, with its beautiful high color, its superb flavor that certainly should, according to my showing (as to color at least), prove a profitable marketable variety; but such is seldom the case with us, for the reason that our market, in its season, is so well supplied with other varieties of fruit, also with a full supply of fruit from southern Illinois, that are better shippers, consequently the Red Astrachan has to be sold low on arrival, when received in large quantities, as we dare not hold, its fine texture tending to rapid decay. Michigan may boast of its ability to raise and market apples of the best varieties and in the greatest perfection as to flavor and keeping qualities of any State in Union. Therefore, our aim should be to plant the best shippers, as the time is not far distant when the exporters of apples will look to northern Michigan as their chief source of supply.

Among the varieties I would name as suitable for profitable planting are the Baldwin, Steele's Red, Willow Twig, Spitzeren, Wagener, Newton, Pippin, Jonathan. Next in order would be the Pennock, Greening, Spy, King, Bellflower, Maiden Blush, Red Astrachan; also the Ben Davis, Seek-No-Further, Snow, Golden, Roxbury Russet.

I would not be understood as limiting the list of varieties to those mentioned, but rather as types of the varieties called for most in market. You may wonder why I speak of the Pennock; it is often required for shipment to Southern points, as it will stand the climate better than our finer varieties, hence for that purpose salable.

The apple list would not be complete without naming at least two crabs; the Hy- slop and Transcendent are at the present time the most desirable of all the crabs, the Hy-slop proving the most profitable from the fact that the Transcendent comes on our market too early for the demand.

I shall not attempt to go through the list of pears, but would say at present, and probably for the next generation, the Bartlett takes the highest rank as a market pear, and more of that variety can be profitably disposed of than all the other varieties put together. Clapp's Favorite, Flemish Beauty, Seckel, Louise Bonne and Duchess d'Angouleme are among the most salable on the long list of pears.

The Black Tartarian is the most salable of all sweet cherries, with the Early Purple Guigne, Gov. Wood, and Napoleon Bigarreau following closely, with Early Richmond and May Duke as the leading sour or cooking cherries.

Plums—the Lombard, Washington, and Green Gage for dessert, with Wild Goose for cooking.

In peach, the yellow fleshed varieties have the preference over the white, such as the Crawford, Jacques, Rarereipe and Smock Free, with a notable exception in favor of the Old Nixon, one of our best shippers.

In grapes, the Concord and the Delaware are the market grapes par excellence.

In currants the Cherry takes the lead. In red raspberries the Brandywine is the best at this date for late, with a new berry. Readers seeking for early, next comes the Kirtland or Highland Hardy, with the Herstine and Turner, though the latter proves not of sufficient firmness for shipment.

In black, Doolittle, Miami and Mammoth Cluster—the Miami being the best of all Black Caps.

The strawberry being produced in the largest quantity of all our market berries, I feel it proper to occupy more time on this fruit. Therefore I propose to give you a list of varieties that have come under my personal observation, and pronounce on their merits solely in their relation as shippers to the Chicago market. I shall name them in their alphabetical order:

*Agriculturist—Crimson; large; good flavor; near market.

*S. Boyden—Dark red; large; sweet flavor; near market.

B. Scarlet—Scarlet; small; good flavor; worthless.

Captain Jack—Scarlet; medium; good flavor; good.

Chas Downing—Light; medium; medium flavor; good.

Chase—Dark crimson; good; good flavor; home market.

Crescent Seedling—Bright scarlet; medium; poor flavor.

Col. Cleary—Light scarlet; medium; poor quality; near market.

Concord—Triumphant—Light scarlet; large; medium quality; good.

Duchess—Light scarlet; medium; medium flavor; near market.

Eliza—No 2—Dark red; large; medium flavor; near market; necked.

Forest Rose—Bright red; large; good flavor; near market.

Glenwood—Dull red; medium; poor flavor; worthless.

Green Prolific—Scarlet; medium; poor flavor; near market.

Green American—Dark crimson; large; medium flavor; near market.

Jucunda—Glossy crimson; good; good flavor; near market.

Kentucky—Scarlet; good; fair flavor; near market.

Lemming's White—Light; medium; best flavor; too light in taste.

M. of the West—Light scarlet; large; good flavor; near market.

President Wilder—Light scarlet; large; best flavor; good.

Sharpless—Glossy red; large; medium flavor; near market.

Triomph de Gaud—Glossy red; large; good flavor; good.

Wilson's Albany—Scarlet; medium; good flavor; good.

The last two named on the list should be placed first as to order of merit when viewed in the light of market berries, for the following reasons: First, the Triomph de Gaud is the best of the large varieties in combining the requisites of a good shipping berry—size, color, and firmness. Last, but not least, the Wilson's Albany, our old, reliable, well tried friend, with its color and shape you are all familiar.

In their eagerness to experiment with new varieties, I fear many that are growing the Wilson for the market are giving it but shabby treatment, not giving it a fair chance to show its good qualities. They do not give it as good a piece of land as they find for their corn patch, neither do they give it as careful cultivation. Let me ask about the one or two dozen plants you have received by mail at a cost of \$3 or \$5, or that some kindly disposed neighbor has obliged you with as a great favor. Do you take those plants and place them in the same field with your Wilson's? Oh, no. You place them in your garden in the best prepared soil, and probably apply an extra dose of some fertilizer to your favored plants. So they are planted, hoed and watered, being tended with care. Is it to be wondered that your pets should reward you with a fine show of berries, that throw your neglected Wilsons in the shade? You feel you have "struck oil," so to speak, and plow out the Wilson and plant your field with your new pet, and ship to market. With them you write your commission man that you send him a cherry berry—a new variety—and that you expect a good price for them. Now, all successful commission men are good judges of human nature, think really more how they can obtain their shipments than they do of abstract theories, and endeavor to answer more with the view to please you than to give their honest conviction. The result is that you plant more of what really proves to be, with field culture, its superfluous flavor that certainly should, according to my showing (as to color at least), prove a profitable marketable variety; but such is seldom the case with us, for the reason that our market, in its season, is so well supplied with other varieties of fruit, also with a full supply of fruit from southern Illinois, that are better shippers, consequently the Red Astrachan has to be sold low on arrival, when received in large quantities, as we dare not hold, its fine texture tending to rapid decay. Michigan may boast of its ability to raise and market apples of the best varieties and in the greatest perfection as to flavor and keeping qualities of any State in Union. Therefore, our aim should be to plant the best shippers, as the time is not far distant when the exporters of apples will look to northern Michigan as their chief source of supply.

Among the varieties I would name as suitable for profitable planting are the Baldwin, Steele's Red, Willow Twig, Spitzeren, Wagener, Newton, Pippin, Jonathan. Next in order would be the Pennock, Greening, Spy, King, Bellflower, Maiden Blush, Red Astrachan; also the Ben Davis, Seek-No-Further, Snow, Golden, Roxbury Russet.

I would not be understood as limiting the list of varieties to those mentioned, but rather as types of the varieties called for most in market. You may wonder why I speak of the Pennock; it is often required for shipment to Southern points, as it will stand the climate better than our finer varieties, hence for that purpose salable.

The apple list would not be complete without naming at least two crabs; the Hy- slop and Transcendent are at the present time the most desirable of all the crabs, the Hy-slop proving the most profitable from the fact that the Transcendent comes on our market too early for the demand.

I shall not attempt to go through the list of pears, but would say at present, and probably for the next generation, the Bartlett takes the highest rank as a market pear, and more of that variety can be profitably disposed of than all the other varieties put together. Clapp's Favorite, Flemish Beauty, Seckel, Louise Bonne and Duchess d'Angouleme are among the most salable on the long list of pears.

The Black Tartarian is the most salable of all sweet cherries, with the Early Purple Guigne, Gov. Wood, and Napoleon Bigarreau following closely, with Early Richmond and May Duke as the leading sour or cooking cherries.

Plums—the Lombard, Washington, and Green Gage for dessert, with Wild Goose for cooking.

In peach, the yellow fleshed varieties have the preference over the white, such as the Crawford, Jacques, Rarereipe and Smock Free, with a notable exception in favor of the Old Nixon, one of our best shippers.

In grapes, the Concord and the Delaware are the market grapes par excellence.

In currants the Cherry takes the lead. In red raspberries the Brandywine is the best at this date for late, with a new berry. Readers seeking for early, next comes the Kirtland or Highland Hardy, with the Herstine and Turner, though the latter proves not of sufficient firmness for shipment.

In black, Doolittle, Miami and Mammoth Cluster—the Miami being the best of all Black Caps.

The strawberry being produced in the largest quantity of all our market berries, I feel it proper to occupy more time on this fruit. Therefore I propose to give you a list of varieties that have come under my personal observation, and pronounce on their merits solely in their relation as shippers to the Chicago market. I shall name them in their alphabetical order:

*Agriculturist—Crimson; large; good flavor; near market.

S. Boyden—Dark red; large; sweet flavor; near market.

B. Scarlet—Scarlet; small; good flavor; worthless.

Captain Jack—Scarlet; medium; good flavor; good.

Chas Downing—Light; medium; medium flavor; good.

Chase—Dark crimson; good; good flavor; home market.

Crescent Seedling—Bright scarlet; medium; poor flavor.

Col. Cleary—Light scarlet; medium; poor quality; near market.

Concord—Triumphant—Light scarlet; large; medium quality; good.

Duchess—Light scarlet; medium; medium flavor; near market.

Eliza—No 2—Dark red; large; medium flavor; near market; necked.

Forest Rose—Bright red; large; good flavor; near market.

Glenwood—Dull red; medium; poor flavor; worthless.

ly hoped for them. Gentlemen, facts are stubborn things. The merchant cannot afford to take home the pale, sickly, half-ripe Downing, and those of like color, or the Monarch, or Boyden with its green tip, to lose 50¢ or \$1 per bushel for the sake of educating the public taste. No; they prefer to take home a well ripened Wilson, that every one likes and appreciates, which they can sell at a profit, and not provoke a total loss should they have to carry any over to the next day, which they know by experience they cannot do with any other variety. Should the Sharpless, one of the best of the newer claimants to public favor, both in color, size and flavor, prove capable of superseding either the T. de Gaud or the Wilson as a successful market berry I shall be greatly surprised, for I do not at this date know of a berry capable of dethroning either the Wilson, Albany, or T. de Gaud from the proud position they have maintained so many years.

What is a Fruit.

The London (Eng.) *Gardeners' Chronicle* asks the above question, and answers it as follows:

"The above inquiry was suggested by a baked apple, and the same or a similar question often crops up with reference to schedules of flower shows. Is a cucumber a fruit or a vegetable? Of course we have our own ideas upon these points, and other people have theirs, and the result is a pretty wide difference of opinion, not unpleasing perhaps to those who contend for the use of English names and English words, but irritating to those who are trying to get at the truth, and prefer precision to vagueness. We turn to Webster's Dictionary, and there we find various interpretations of the word "fruit"; one is vague enough to please any one—"Whatever is produced for the enjoyment of man or animals by the processes of vegetable growth."

"It is clear that branches, leaves, flowers, roots, tubers, seeds, perfumes, galls might be thus classed as fruit, even as the Irishmen call the nobler tuber, "the fruit at the root." But for gardening purposes, and still more for botanical purposes, a little more precision is necessary, else we might as well say that mother and child are identical, and that the nail on the great toe of Hercules is equivalent to Hercules himself. The dictionary is, however, equal to the occasion. If we do not like one meaning, we can try another. Here is one that will suit our purpose—"That part of plants which contains the seed."

The dictionary at once goes on to point definition by extending it and making it so vague that it ceases to be a definition at all; but we will stop at the "part of plants which contains the seed"—we will confine it to that, and not include anything outside the fruit, not being an integral part of it; nor will we include anything inside of it which is not essentially a part of it.

The fruit is that part of the plant which contains the seed, and it is this part which contains the seed." The dictionary at once goes on to point definition by extending it and making it so vague that it ceases to be a definition at all; but we will stop at the "part of plants which contains the seed"—we will confine it to that, and not include anything outside the fruit, not being an integral part of it; nor will we include anything inside of it which is not essentially a part of it.

Treated in this way this most delightful fruit can be raised in great perfection and the tree will live to a "good old age."

One other remark, and I will close. In planting the cherry place them in rows running east and west. This will throw the shade from one to the other at the fatal time of the day in summer (3 to 6 o'clock) and thus render artificial shading less imperative. From the last of October to the middle of November is as good a time as any to put out all kinds of fruit trees, but they should be heavily mulched before freezing weather with leaves or straw, which should be removed in March following. Such is my experience, after twenty odd years of observation and trial.

The core of the baked apple is then, according to this, the true fruit, for it is the part which contains the seeds, and the seeds are the seeds. It is a cartilaginous, five-lobed capsule, splitting along both edges.

What oddities botanists are! They seem to reverse the natural order of things—they leave on their plates the fruit, and they eat something which they say is not the fruit? What is that something which they say is not the fruit? To answer this question to his own personal satisfaction—not, that is, to be dependent on dogma and "I say so" evidence, which is a kind of evidence eschewed in science except where no other can be had—the reader should see before him a flower of an apple or pear in the earliest stages of its growth, and he should trace in other stages from this earliest condition to the ripe state, the growth of the apple or of the pear. There are not many young gardeners who have skill and patience enough to do this thoroughly.

What is ordinary language called the fruit is the swollen flower-stalk. Alchemillas and spireas, peaches and cherries, are not to be had in flower just now; else a cut down through the centre of the flower of either of these would reveal the cup-like stalk encircling the young fruit in the centre, just as a pill is enclosed within a pill-box. Now suppose the cup to be fleshy, and so thick as to come in contact with the fruit, and you would have exactly the condition of the apple. So, then, to say that the core of the apple is the true fruit, and the flesh thereof the dilated flower-stalk, is no dogma to be accepted as an article of faith, but is a statement which any one with a pair of eyes, ordinarily nimble fingers, and a little patience, can, at the proper season, verify for himself.

Another proof is afforded by the curious malformations, of which the *Gardeners' Chronicle* has from time to time published so many illustrations—cases wherein the stalk has asserted itself more or less successfully as a stalk and borne branches and leaves. Only the other day Mr. Burbidge sent me a note of a Bishop's Thimble pear, which produces pearls of the ordinary character, together with others cylindrical and fleshy, but coreless—swollen stalks without any fruit at all.

What is the purpose of this swollen mass outside the fruit? Nowadays we seek for an intelligent purpose in everything; we believe that everything has been designed and created with a power to affect us directly or indirectly to ourselves or to other creatures. It is hard to think that a sour crab or wild pear can be attractive; nevertheless there are some creatures, perhaps, to whom the acidity is not disagreeable, and who might be tempted by the glowing colors to prey even on the crab, and so liberate its seeds and secure the perpetuation of the species; or it may be that the sour juices, like the prickles of a thistle, serve to keep off intruders and unwelcome guests anxious to secure the toothsome seeds.

"Whether or no man has been sharp enough to avail himself of the wonderful power which the flower-stalk has of making itself agreeable, and by following out the same methods as Nature herself—making her work for him, as it were—he has been the means of setting in action the

evolving forces which out of a crab or a wild pear develop a Cornish Gillyflower or a Marie Louise. If he is to do more in this direction—and we cannot doubt that he will—his chance of success lies largely in seeing things aright, calling them by their right names, and directing his efforts in the right direction.

"So, after all, to be able to recognize the core of an apple as the fruit proper, and to see in the flesh of an apple a swollen flower-stalk, is not to indulge in a mere botanical technicality, as some might at first be inclined to suppose, but it affords a means of ascertaining a truth, and as such of opening up possibilities of future utility and development; for truth is never barren of results—the sterility lies with the man who does not avail himself of the truth so far as he can—deep thoughts to be evolved from the castaway core of an apple."

Culture of the Cherry.

It is a fact well known that the cherry tree is apt to crack in the body by the intense heat of summer. This is especially true of the large, sweet varieties.

The Morello, of all kinds, does the same, to a less extent, however. The only plan known to me to avoid this "three o'clock scald," as it is termed by some, is to shade the trunk by an upright board or other thing, until the tree throws out branches enough to shade itself. If the limbs are allowed to grow low enough down on the body of the young tree, say about four or five feet, the trunk will shade the trunk sufficiently to prevent the cracking of the bark and consequently early decay and death.

Another thing fatal to the cherry tree especially, is the placing of strong, hot manure around the base of the trunk. I contend that no manure should be put on the surface near the tree, but after the fourth or fifth year from planting let the grass grow close to the trunk, and never place strong manure on the surface near the body.

MICHIGAN FARMER

—AND—
State Journal of Agriculture.

A Weekly Newspaper devoted to the industrial and producing interests of Michigan.

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The Michigan Farmer

—AND—

State Journal of Agriculture.

DETROIT, TUESDAY, JANUARY 31, 1882.

Mr. P. W. RYAN is the authorized subscription agent of the MICHIGAN FARMER, and parties can pay money to him at our risk.

WHEAT.

The receipts of wheat in this market the past week have been 85,874 bu., while the shipments were 45,725 bu. The visible supply of this grain on Jan. 21 was 17,321,805 bu. against 38,309,199 bu. at the corresponding date in 1881. This shows a decrease in the amount in sight the previous week of 60,015 bu. The deliveries at seaboard ports for the week were 830,643 bu. against 692,778 bu. the previous week, and 1,129,404 bu. the corresponding week in 1881. The export clearances for Europe for the week were 530,585 bu. against 676,648 bu. the previous week, and for the last eight weeks 5,915,424 bu. against 11,564,038 bu. for the corresponding eight weeks last year. The stocks of wheat in this city on Saturday last stood up 711,809 bu., against 1,214,399 bu. at the same date in 1881.

The market the past week has shown more activity, and though figures reached at the date of our last report have not been maintained, there has not been such a decline as was predicted. Opening on Tuesday morning last at \$1 39 1/2, a fractional decline was noted each day until Saturday, when the market closed with No. 1 white at \$1 37 1/2, a decline of 2¢ per bu., and No. 2 red at \$1 40 1/2, a decline of 1¢. The transactions were quite large for the week, footing up 313 carloads of spot, and 3,415-000 bu. of futures.

The following table exhibits the daily closing prices of wheat from January 2 to January 30:

	White No. 1	No. 2	No. 2 extra white	red
Jan. 2	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
3	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
4	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
5	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
6	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
7	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
8	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
9	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
10	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
11	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
12	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
13	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
14	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
15	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
16	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
17	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
18	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
19	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
20	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
21	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
22	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
23	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
24	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
25	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
26	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
27	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
28	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
29	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2
30	..... 0 00	1 39 1/2	1 39 1/2	1 39 1/2

Yesterday the market opened weak, and under reports of a decline at Chicago and New York dropped to \$1 34 1/2 for No. 1 white, a loss during the week of 2¢ cents.

Futures, while being more active than cash wheat, are just as irregular, declining or advancing upon the slightest provocation. This gives the market a very uncertain tone, and shows how little dealers are disposed to trust their own opinions.

The following statement shows the prices of futures on Monday of last week as compared with those of yesterday:

	Jan. 23	Jan. 30
February	1 40 1/2	1 36 1/2
March	1 41 1/2	1 38 1/2
April	1 42 1/2	1 39 1/2
May	1 43 1/2	1 40 1/2

The advance in freights between the west and seaboard is credited with causing the decline in prices. At Chicago, freights are now 20¢ per hundred on grain, and fall rates insisted upon. The Milwaukee market is "cornered" for January, and prices of No. 2 spring were pushed up to \$1 40. This will end to-day, and things resume their normal condition in that market. There are rumors of a "corner" for February wheat in Chicago, based on the small amount of receipts that will grade no 2.

In Minnesota it is said millers cannot find sufficient wheat of good quality to keep their mills running; very little grading over No. 3. The result is that whatever stocks of fair quality there are in that State will be shipped out, as millers will buy it for flouring and shippers will have to take the lower grades or none.

The market is suffering from the panic that is now prevailing in France and Austria, which has shortened the supply of money, higher freight rates, making a difference of about 5¢ per bu. in cost of transportation, and the opinion, fostered by all kinds of rumors, that the west is full of wheat which will one day flow down on the markets and swamp them. It is wonderful prices have kept up as well as they have under all these adverse circumstances.

The English market advanced during the week, but are again weak and lower, the reports from there stating that the belief in heavy stocks held on this side of the Atlantic causing a depressed feeling in the trade.

The following table will show the prices of wheat and flour in the Liverpool market on Saturday last, as compared with those of one week previous:

	Jan. 26	Jan. 27
Flour, extra State.....	10s. 0 d	13s. 9 d.
Wheat, No. 1 Michigan.....	10s. 7 d	10s. 6 d.
do No. 2 spring.....	10s. 8 d	10s. 7 d.
do winter wheat.....	10s. 7 d	10s. 6 d.
Corn, mixed new.....	5s. 11/4d	6s. 0/4d

*** CORN AND OATS.

The receipts of corn here the past week amounted to 23,514 bu., and the shipments were nothing. The visible supply in the proceedings.

DAIRY PRODUCTS.

The receipts of butter in this market the past week were 30,807 lbs, and the shipments were 42,046 bu. The market has shown decidedly hardening tendencies, and the choicer grades have been advanced 1 to 2¢ per lb. during the week. For choice lines of fresh made table butter dealers are paying 24 to 25¢ per lb., and the inquiry is in excess of the supply. In the medium and lower grades, however, there is but little inquiry, and stocks are ample, and prices range from 20 to 22¢ per lb. for No. 1 mixed, and 26¢ for rejected. In Chicago there has also been a slight decline, spot being quoted at 60¢ for No. 1 mixed, and 26¢ for rejected. Future closed at 60¢ for February, and 65¢ for May. In Toledo the market is reported quiet at 63¢ for No. 2 spot and 64¢ for high mixed. In futures January closed at 63¢, February at 63¢, and May at 68¢. The weaker feeling in this grain does not seem to be based upon any very tangible reasons, and can probably be attributed to a slight increase in the receipts at various points and the action of those engineering the various speculative reviews of the market.

Fancy creamery is in light supply and firm. Average Elgin brands are offering at 42¢, but a few special marks cannot be easily bought at 43¢. Choice Iowa creameries scarce and firm at 41¢, with rare shades a shade higher; most of the lots arriving are somewhat defective and sell at about 40¢; some inferior grades are offered at 35¢, and 36¢, and rule dull. Fall creamery quiet. June packed without important sales. State dairy butter is very firm; in voices of good to prime tubs are moving readily at 32 to 35¢; selected October tubs have occasionally reached 38¢. Choice firkins scarce and firm. Entire dairy in small supply. There is a good inquiry for prime to choice, but few are of quality to reach outside quotations. Low grades of dairy are very quiet at the prices asked. Choice Western dairy and imitation creamery are in good demand and firm; records of dairy are generally of uniform quality, sales quite rare above 30¢. Fine fresh factory continues in light supply, good demand dull firm; a few extra marks cannot be brought at our outside quotations. Quotations for Western in that market are lower, and closed as follows:

	1882.	1881.
Chicago.....	3,635,000	2,335,000
Indiana.....	290,000	495,000
Louisville.....	230,000	350,000
Indianapolis.....	235,000	275,000
Milwaukee.....	285,000	320,000
Kansas City.....	263,469	265,000
Cedar Rapids.....	116,065	100,000
St. Joseph, Mo.	105,335	100,000
Des Moines, Iowa.....	44,000	55,000
Pearl, Ill.	35,608	50,828
Total, above and all places.....	4,960,000	5,370,000

♦ ♦ ♦

WOOL

The wool market keeps quiet but are as strong as ever. In fact in New York the *Economist* says the market is virtually cleared of clothing wools of foreign growth, with the trade in a very favorable position. In Boston the situation is about the same as in New York, prices being held very firm on fine grades of clothing wools, both fleece and pulled. Sales of Ohio XX have been made the past week in that market at the full previous quotations of 45¢, while choice Michigan and Wisconsin X have brought as high as 42¢ to 43¢. Still opinions as to the future of the market are more diverse than they were previous to the turn of the year. The foreign markets are very firm, and the differences in prices between the British markets and our own preclude importations except at a loss. So far as can be learned there is no disposition to give way in the least, and holders of fine fleeces are confidently looking for higher prices. We have no doubt this will be realized before the season closes. All admit that the quantity of fine wool on hand is small compared with previous years, and that there is not enough in the country to bridge over to another clip. From abroad we cannot look for any considerable supplies as the margin for importations is not sufficient to tempt any to run the risk. There is plenty of low and defective wools and the coarse grades that have been neglected during the year, but this description is as dull as ever, and does not enter into the consumption of manufacturers to any extent.

As promised, in our last issue we gave the report in full of the Committee of the State Agricultural College, sends us the following points in regard to the ensilage experiment commenced at the College this season: "The silo was filled Sept. 18-17 with the product of one and three fourths acres of corn, cut in pieces 3 of an inch in length. This was thoroughly packed, covered and weighted with stone. The silo was opened Dec. 15th, and the ensilage was found to be well preserved. We have been feeding three lots of cattle, wholly or in part with the ensilage, since that date. All of our animals eat it with avidity, and repeated weighings show that they are thriving and doing well on ensilage rations."

PROF. SAMUEL JOHNSON, of the State Agricultural College, sends us the following points in regard to the ensilage experiment commenced at the College this season: "The silo was filled Sept. 18-17 with the product of one and three fourths acres of corn, cut in pieces 3 of an inch in length. This was thoroughly packed, covered and weighted with stone. The silo was opened Dec. 15th, and the ensilage was found to be well preserved. We have been feeding three lots of cattle, wholly or in part with the ensilage, since that date. All of our animals eat it with avidity, and repeated weighings show that they are thriving and doing well on ensilage rations."

MR. W. C. SMITH, of Carson City, writes for information about artificial incubators, specifying one on a small scale as being best suited to his wants. We do not know of an incubator that would be likely to prove a practical and paying investment. While the hatching process can be got through with by several different incubators, the number of the chickens that can be brought to maturity is too small to pay for the trouble and expense. Four or five years ago incubators were being advertised in all the standard journals, but we fail to find the address of a single proprietor in any paper reaching this office. Evidently the old hen is a necessity in chicken raising.

We have received the Seed Catalogue for 1882 from Hiram Sibley & Co., Rochester, N. Y. It is handsomely gotten up, and is very full and complete. The list of flowering plants and seeds is very full, and contains not only the old favorites but also the new and desirable sorts, and the latest novelties. Considerable attention is paid to ornamental grasses and everlasting. The department devoted to garden seeds contains all the latest and standard sorts. All seeds put upon the market are carefully tested in the large hothouse belonging to the firm, and every precaution taken to send out only the best. The catalog also contains a fine lithograph of Mr. Sibley.

We have received the first number of the *Breeder's Life Stock Journal* in its new form. It is now in pamphlet shape, and is a well-printed and interesting journal. The name, however, is a misnomer, and its publisher should change it. As it is at present it is very misleading. We suggest that the title *Herd Book* as more in consonance with its contents, and as more fully explaining the aims of its proprietors. To those interested in this breed of cattle it will prove a valuable addition to their list of agricultural publications.

The catalogues of the stock to be offered at the auction sale of the herd of the late Mr. R. L. Geddes, have been issued, and can be had upon application to the administrator, Mr. T. J. DeForest, Ann Arbor. The auctioneer who will have charge of the sale is Mr. Francis Graham, one of the best posted men on Shorthorns in the country. We intended giving a list of the animals to be sold, but the catalogue was received too late from the printers to do so, and consequently we have to defer

JANUARY 31, 1882.

THE MICHIGAN FARMER.

She came to
and lived on

Wilder. Plow
small scale last
duties to employ

23rd ult. Major
Men of the heart.
Chris.
1841.

Goldsmit & Gil-
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00, but the horse
partially damaged.

The stamp tax on patent medicines yields
the government nearly \$2,000,000 a year, and
the manufacturers are making a combined
effort to have the tax repealed.

One of the murderers of the Gibbons
family at Ashland, Ky., was taken to
Cincinnati, Ky., for trial, has been found
guilty and sentenced to be hanged.

The chief engineer's department has re-
commended the improvement of the Calumet
River from South Chicago to the new village
of Pullman, so as to permit the passage
of the largest vessel.

Miss Maud Jones, of the Fox novelty
theater company, last week co-wedded T. J.
Ward, editor of the Middleweek, O., Signal,
but Ward got a revolver and chased her out
of the building.

Representative Brown of Indiana has
secured the adoption by the house of his
resolution calling for information as to
future appropriations needed to pay pensions
under certain conditions.

The total product of bituminous coal in
the United States last year was 49,429,580
tons. Average price at the mines \$1.22, as
compared with \$1.92 in 1880. The anthracite
product was 28,646,906 tons.

Cigar manufacturers want a reduction of
the tax on cigars from \$5 to \$5 per thousand.
Their representative addressed the Internal
Revenue Commissioner and the Ways and
Means committee to that effect.

The Secretary of the Treasury is considering
the propriety of relieving the Canada Southern,
Great Western, and Grand Trunk Rail-
roads from payment of customs expenses at
frontier points to be paid by said lines.

In the matter of the offer of \$2,600,000 for
the same estates by an organization of
creditors, and the petition of the trustee for
permission to accept it, the Supreme Court of
Rhode Island appointed February 11 for a
hearing.

Two Italians were around Lafayette, Ind.,
exhibiting a "tame" bear. The other day it
went for the man, gave them a terrible
mauling and made its escape. It then at-
tacked a farmer's family in the vicinity, and
was killed before it could do any more damage.

If a party neglects or refuses to keep up
his division fence as required by law, and
the adjoining owner's stock get upon the
party's premises by reason of such neglect
or refusal, he cannot recover damages from
the adjoining owner for any injury they
may occasion.

H.A.H.

FARM LAW.

NEW ADVERTISEMENTS.

Inquiries from subscribers failing to receive this head
will be answered in the column that appears in the
next issue of general interest. Address communications to
Henry A. Haigh, Attorney, Setitz Block, Detroit.

Line Fences.

Two inquiries have been received relative to this subject. One is whether there
is any provision for compelling adjoining
land owners to build a line fence, when
the land of one owner is unimproved; and
the other is whether where a line fence
has been built and one owner neglects or
refuses to keep his portion in repair, there
is any way of compelling him to repair it, and
whether each owner would be liable for
injuries resulting to stock by reason of
such fence being out of repair.

First.—There is no law by which one
land owner can compel his adjoining
owner to unite with him in building a line
fence between them. The statute bearing
upon the subject applies only to cases
where the adjoining lands are improved.

Second.—If a partition fence has been
built, and the lands are improved, and one
party refuses to keep up his share of the
fence, the aggrieved party may complain to
the fence viewer (path-master) of the town-
ship, who, after due notice to each party,
shall proceed to examine the same, and if
they determine that the fence is insufficient,
they shall signify the same in writing to
the delinquent occupant of the land, and
direct him to repair or rebuild the same, and
may recover from the delinquent double
the cost of the same. Compiled laws 297.

If injury results to stock from a man's
neglect to keep up fences as required by
law, that man would be liable for the
damage done.

If a party neglects or refuses to keep up
his division fence as required by law, and
the adjoining owner's stock get upon the
party's premises by reason of such neglect
or refusal, he cannot recover damages from
the adjoining owner for any injury they
may occasion.

H.A.H.

5500 Cash in Prizes.

It is only a few years since Messrs. Hiram
Sibley & Co. were known at all in the seed
business, but in those few years they have ad-
vanced with such wonderful rapidity that
they are now universally recognized as leading
seedsmen. Their warehouse at Rochester
is a mammoth building, nine stories high,
while in Chicago they occupy a five story
building, and have no room to spare. Mr.
Sibley is widely known as proprietor of the
40,000 acre Sullivan Farm in Illinois, the
largest cultivated farm in the world. Here
over 3,000 acres were last year devoted to seed
raising.

Just now the firm are specially desirous
of obtaining all information calculated to fit
them for the most intelligent service of their
many customers in the South. To this end they
are offering \$500 cash in prizes for the
best essays on growing in the Southern
States. These essays must come from those
practically acquainted with all the conditions
affecting the subject; and the decision re-
garding their respective merits will be made by
well-known and admittedly competent
judges. Full particulars can be obtained by
addressing HIRAM SIBLEY & CO., Seedsmen,
at either Rochester, N. Y., or Chicago, Ill.,
Administrator, Auctioneer.

187 Commencing at 9 a.m. all the farming
tools and utensils, four good farm horses and a lot
of miscellaneous property will also be offered at
auction.

188 On Wednesday, February 15th,
AT ONE O'CLOCK, P. M.,
The cattle to be offered number twenty-eight head,
18 Cows and Heifers and 10 Bulls and
Bull Calves.

189 And they will all be sold without reserve. They are
all registered in the American Shorthorn Herd Book
except the calves. The young stock are from the
bull Calverdale, D. 29, 1881, and the dams from
the 284 Duke of Airlie out of the Duchesses
of Cambridge by 22d Duke of Airlie; and the
bull Gentry, Custer 3565, bred by Avery & Murphy,
of New York, and the dams from the 22d Duke of
Princess 2d by Oxford Beau 2d 1808. Every
animal has a straight and well-authenticated pedigree,
and is from some of the best families of short-
horns.

An enterprising young man has been driv-
ing a brisk business in Eastern Texas, vac-
inating the negroes with beewax. He
charged a dollar a piece, re-re-entitling himself
as a government agent and threatened
severe penalties on all who failed to comply.

The House Committee on Education and
Labor have decided to report a bill prohibiting
further Chinese immigration for 25 years,
but permitting those now in the country, and
merchants, teachers, travelers, etc., to come
and go on exhibition of proper certificates
from the authorities.

Senator Blair has introduced a bill into
the Senate to appropriate \$15,000,000 this
year for the construction of a trans-
continental railroad, and \$10,000,000
more being diminished \$1,000,000 each year
for educational purposes in the south, which is
evidently endorsed throughout that section.
It does not, however, meet with the approval
of northern men.

The sub-committee of the house on Com-
mittee on Agriculture have agreed to report
favorably to the full committee the bill of
Mr. H. A. Haigh, of Michigan, authorizing
the Bureau of Animal Industry with a view of
preventing the exportation of diseased eat-
able, and the spread of infectious or contagious
diseases among domestic animals.

At a meeting of the House Committee on
Agriculture and Labor have decided to report a
bill prohibiting Chinese immigration for 25 years,
but permitting those now in the country, and
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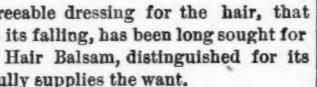
The Standard Oil Company have purchased
the effects, etc., of the Atlas Refining Company,
and Buffalo and Rock City Pipe Line
Company, for \$250,000.

Mrs. Lydia E. Pinkham, 233 Western
Avenue, Lynn, Mass., is rapidly acquiring an
enviable reputation for the surprising cures
which daily result from the use of her Vege-
table Compound in all female diseases. Send
her for pamphlets.

As agreeable dressing for the hair, that
will stop its falling, has been long sought for
Parker's Hair Balsam, distinguished for its
purity, fully supplies the want.

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— Gathering Cream.



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Davis & Fairlamb,
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further particulars, address

J. EVARTS SMITH,
Ypsilanti, Mich.

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CANES, including the various kinds of Amber and their
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use in small compass and furnished free to applicants, it is the
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LOVE

COURSHIP & MARRI

Poetry.

SEVEN YEARS OLD.

Seven white roses on one tree,
Seven white leaves of blanched leaven,
Seven white sails on one soft sea.
Seven white swans on one lake's lee,
Seven white flowerlike stars in Heaven
All and the types unmeet to be
For a birthday's crown of seven.

Not for the radiance of the roses,
Not for the blessing of the bread,
Not for the breeze that day grows is
Fresh for seals and swans, and closes
Wings above the sun's grave spread,
When the starshells on the snows are
Sweet as sleep on sorrow shed.

Nothing sweet, nothing best,
Holds so good and sweet a treasure
As the love wherewith once blest
Joy grows holly, grief takes rest,
Life, half tired with how to measure,
Fills his eyes and lips and breast
With most light and breath of pleasure.

As the rapture unpolished,
As the passion undefined,
By whose force all pains heart-rooted
Are transfigured and transmuted,
Recompensed and reconciled,
Through the imperial, undepressed,
Present godhead of a child.

Brown bright eyes and fair bright head,
Worth a worthless crown than this is,
Worth a worthless song instead,
Sweet grave wise round month, full fed
With the joy of love, whose bliss is
More than mortal wine and bread,
Lips whose words are sweet as kisses.

Little hands so glad of giving,
Little heart so glad of living,
While the strong swift hours are weaving
Light with darkness woven above,
Time for mirth and time for grieving,
Plume of raven and plume of dove,

I can give you but a word
Worn with love therein for leave,
But a song that falls unheard,
Yet each of us must live,
Yet by song so far from heaven,
Whence you came the brightest bird,
Seven years since, of seven times seven.

MARGUERITES.

[To a friend, with a painting of field daisies, on her twenty-first birthday.]

There were the daisies, sons and gay,
That grew in a meadow far away,
All in the wealth of one summer day.

Silver and gold, with never a care,
Dame Nature scattered them everywhere,
Lavishly making the earth so fair.

Oh, but the world is fairest in June!
Aneath the sun or beneath the moon,
All living is set to a sweet low tune.

Standing with all that beauty so near,
A daisy nodded—I cast by fear,
And gathered my hands full—now look here.
Twenty-one daisies for you, my dear,
Gathered from June for the winter's cheer,
To gladden this notable day in the year.

May your life be pure as a Marguerite,
A sunny path lie before your feet,
And you, for the dear Christ's kingdom, meet.

—A. C. Swinburne.

Miscellaneous.

LITTLE SLY BOOTS.

BY THE AUTHOR OF "A GREAT MISTAKE," "HUSBAND AND WIFE," "YES OR NO?" KING COMPTON; OR, RUBY NORTH'S LOVERS," "ROSE OF THE WORLD," &c.

(Concluded.)

"How tempting the water looks!" cried Mrs. Dering wistfully. "Lord Oldentowers do you tell all inclined to pull us round to that clump of willows? Floss, take Lord Oldentowers down to the boat-house while I make the necessary inquiries of good Mrs. Binney. I will join you in a few minutes; so don't go away. And pray, Lord Oldentowers, exert your authority, and don't allow that silly child to do anything rash—she is such a water-baby!"

The little widow was gone, her pale yellow gown and black lace draperies disappearing within the sombre archway of the oaken door. Floss and her lover were alone at last.

"Whereabouts is the pond?" began the young man—indeed he did not very well know what he was saying; and Floss, laughing at the question, ran down to the sloping bank, and was kneeling and reaching after the water-lilies before he could stop her.

"You must not do that," he whispered ardently. "You are setting your sleeve, and I am not changed to take care of you?"

"I can take care of myself!" returned Floss, pouting.

She did not seem to be in her usual clouded good spirits.

"But not so well as I could, if I had the right," continued Lord Oldentowers hurriedly.

"But you have not got the right!"

The light was stealing back to the child's eyes, a lurking smile treasured round her rose red lips. Floss Dering must have been heavy-hearted indeed when a challenge to flirt, to make a conquest could be thrown down to her in vain.

"Of course I have not, and I know it is too soon to speak. But—the lover was twirling his hat round and round in his hands in nervous way, and struck Miss Dering as looking very ridiculous—but, if you thought you could ever give me that right—"

The right to keep me from wetting my sleeves?"

"No, no. Oh, Floss, don't be so cruel!"

"I don't know what you mean," she answered, with coquetry, and yet half sulky too. "What is it you want me to say?"

"I know I am an awfully old fellow and that, but—"

Floss maintained a provoking silence. She had got up from her knees and was looking down at the point of her shoe, with which she was tracing small geometrical patterns on the turf. Her back was turned to the house; the low, orange light lay warm upon her strange, sweet loveliness.

"Floss, have you nothing to say to me? Can't you help a fellow out?" stammered Lord Oldentowers, who had never proposed to any one before. Mrs. Hygge having saved him the trouble in the case of his first poor little bartered wife. "You know how I adore you—"

"No, I don't," said the child archly; "you never told me so."

"But if I told you so now," pleaded her lover, gaining a little confidence as he possessed himself of the small littlest hand that was nearest to him—"if I told you that I can sleep for thinking of your beauty, that I am—an awfully hard hit, by Jove—that would you take pity on a fellow?"

"Pshaw! if the fellow promised to be good. Oh, don't, Lord Oldentowers! You are hurting me!"

"Don't take it away!" cried the infatuated young man. "Let me keep it as a token that you have promised to be my wife!"

At last the words were spoken. He had been in earnest then. Mama was right. She—Floss—could be Lady Oldentowers if

she chose. The child cast a sly glance at her admirer, and sighed.

"I wish his hair was not quite so straight and so light!" she thought wistfully. "I wish Humphrey was as rich as he—or poor Charley." And then, with a little shrug of the shoulders, she put the small malreated hand into Lord Oldentowers' expectant palm.

"You love me?" he cried, catching her in his arms. "Floss, say that you love me a little."

"Haven't I promised to marry you?" she returned, with indifference, and trying to free herself from his embrace; and then, as he held her closer and sought her lips with his own, she pushed him away and burst into tears. "I let go!" she exclaimed pettily. "I love you—and being married—
and everything in the world!"

"Fly!" pleaded the lover. "why do you avoid me, if you—Good Heaven, what is the matter?"

For, with a sudden sharp cry, and tinging as white as a sheet, the child sank on her knees and buried her face in her hands. Lord Oldentowers turned to the spot on which her eyes had been fixed in a horrified; and there, pale and stern, stood Humphrey Lamont, who had been looking on at this strange betrothal.

The little lord held out his hand at once, his face flushing with mingled embarrassment and delight.

"What, Humphrey?" he cried, "Welcome home, my dear old boy!"

But Mr. Lamont did not reply, nor take the offered hand. And above the kneeling, sobbing figure of the girl the two men stood and looked into each other's white and startled faces.

CHAPTER XVI.

Marjory's unexpected return was a burst of sunshine to the dingy house in Charlotte Street.

Bob behaved all the evening like a man possessed; the children held high carnival in auntie's honor, and even sad-faced little Kitty in her widow's cap, brightened up at sight of the girl.

No one had time to notice how pale and wan the young governess was looking; they were too busy getting her room ready and preparing a cool and tempting little supper. Nor did they ask her why she had returned. It was enough that they had their little Marjory back again, if only for a few days; and it seemed as if they could not make enough of her, and as if she stood in some danger of being devoured by loving eyes, or kiss all to pieces between them.

And never had their love seemed sweeter to the girl than now, when her bruised and aching heart had come back to them bearing a wound of which she could not speak.

"How glad I am to be at home!" she sighed over and over again as she sat with her brother in the dear old den late into the summer night. "You are not to tell me you still love me!" but I confess I told you so," her dearest old Bob; but I confess I like sitting here at your feet and filling your pipe and listening to your music better than playing German or taking duty-walks with Miss Dering."

Bob stroked the brown head that lay upon his knee. He had secretly determined that Marjory should never leave him again. Life was not worth living without her, in his opinion; and, if it was absolutely necessary that more money should be made, he would make it somehow; but Marjory should stop at home now that they had got her back.

"Schreiner has behaved very liberally about the cantata, child?" he merrily declared presently. "I sha'n't know what to do with all my money."

"I meant to bring you all my salary, dear!" Marjory answered, "but I have—I don't know—this morning that I suppose she forgot it. I am going to go back, you know, as soon as Mr. Lamont arrives," and with only the quiet stars to look in at her flushed face, the girl told her brother of the new change in Humphrey Lamont's fortunes, and how he was once more the poor and fallen struggling "Jasper" they had known.

"Like that!" he laughed bitterly. "I am not to admit that I, who was blind, now see? I am not to be man enough to meet meanness and greed and low trickery by honest contempt!" Marjory, I have been passion's slave for long enough, Heaven knows; but my passion, or infatuation, or whatever you may choose to call it, for Floss Dering fell dead—slain by her own pride at last night by the great pond at Winterlese!

"Her mother assures me that it will not, But I am afraid—dear—she is very young and thoughtful—she hardly understands Mr. Lamont or knows how fortunate she is to have won him."

"He is a man who will make her very happy, Marjory, if she has a soul above un-feminine gowns and vulgar dinners. But, if her peace of mind depends on her clothes or the neighborhood she lives in, why?"

There was no answer. Marjory's thoughts had wandered off into the sweet impossible dream of life as it might have been if "Heaven had made her such a man; and she lay so quietly against her brother's arm that presently he thought she had fallen asleep, and, rousing her gently, he packed her off to bed—the little narrow white bed in which she had lain many and many a night thinking of her love for Humphrey, and by which she had knotted so often to pray for him. As the girl fell upon her knees beside it, free for the first time to sob out all her pain and longing and hopelessness, it seemed as if a weight were being lifted from her heart; and, as she rose, she was again almost the quiet Marjory of so few months before.

"Marjory, what are you thinking about?" asked Mr. Lamont, after several minutes of silence. "I am sorry to say, Marjory, I have suddenly this morning that I suppose she forgot it. I am going to go back, you know, as soon as Mr. Lamont arrives," and with only the quiet stars to look in at her flushed face, the girl told her brother of the new change in Humphrey Lamont's fortunes, and how he was once more the poor and fallen struggling "Jasper" they had known.

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"And then the young man did tell Marjory of what he had discovered, and of the terrible scene that had ensued.

And, as Marjory listened, it seemed to her that her heart stood still in dread and doubt and a strange unwilling joy. Was Humphrey indeed cured of his madness for a child who had never been worthy of him? Had he heard the truth about the letters? Was he keeping silence about them out of pity for her humiliation? Was it to show her that she was forgotten? that he was talking to her and looking at her so kind—so like the "Jasper" of the dear dead old days?

Little Kitty never could understand how Marjory, who was so clever with her needle, came to make up Lill's pink-and-white frock wrong side out; but she spent a whole hour trying to get it right, and at last undid the whole thing to start afresh.

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Little Kitty never could understand how Marjory, who was so clever with her needle, came to make up Lill's pink-and-white frock wrong side out; but she spent a whole hour trying to get it right, and at last undid the whole thing to start afresh.

"Marjory, what are you thinking about?" asked Mr. Lamont, after several minutes of silence. "I am sorry to say, Marjory, I have suddenly this morning that I suppose she forgot it. I am going to go back, you know, as soon as Mr. Lamont arrives," and with only the quiet stars to look in at her flushed face, the girl told her brother of the new change in Humphrey Lamont's fortunes, and how he was once more the poor and fallen struggling "Jasper" they had known.

"Like that!" he laughed bitterly. "I am not to admit that I, who was blind, now see? I am not to be man enough to meet meanness and greed and low trickery by honest contempt!" Marjory, I have been passion's slave for long enough, Heaven knows; but my passion, or infatuation, or whatever you may choose to call it, for Floss Dering fell dead—slain by her own pride at last night by the great pond at Winterlese!"

"And then the young man did tell Marjory of what he had discovered, and of the terrible scene that had ensued.

And, as Marjory listened, it seemed to her that her heart stood still in dread and doubt and a strange unwilling joy. Was Humphrey indeed cured of his madness for a child who had never been worthy of him? Had he heard the truth about the letters? Was he keeping silence about them out of pity for her humiliation? Was it to show her that she was forgotten? that he was talking to her and looking at her so kind—so like the "Jasper" of the dear dead old days?

JANUARY 31, 1882.

THE MICHIGAN FARMER.

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A DORING ROMANCE.

A wintry night, the moon shines bright,
The stars look down with clear cold light.
A vast expanse of glittering ice
A coasting hill all smooth and nice.
A hooded mail with scarlet mitts,
A for lined cloak and her rubies "tips."
A college youth a master long,
A polo cap and mustache brown.
A boy of latest manufacture,
With rope and wood of finest texture.
A maiden seated with much grace,
An arm around her slender waist.
A gentle push, a rapid glide
Safe to the bottom of the slide.
A slippery walk up the hillside fall,
A gentle scream and a snowy fall.
Another "bob" to the foot of the hill,
A crash, a plunge, a general spill.
A mastache close to a scarlet check,
A triumphant youth, a maiden meek.
A disregard of the girly weather;
"Say, shall we bob through life together?"
A glance from the dewy eyes half wet;
"If I were sure we would never upset."

Raphael and the Legend of the Madonna della Sedia.

Among the most lovely Madonnas of this famous artist in that called "Della Sedia" [of the chair], and there is a pretty legend about it which says that hundreds of years ago there was a hermit named Father Bernardo, dwelling among the Italian hills, and that he was much loved by the neighboring peasants, who went to him for advice and instruction. He often said that in his solitude he was not lonely, for he had two daughters: one of them could talk to him, but the other was dumb. By the daughter who spoke he meant the daughter of a vine-resser who lived near by. She was named Mary, and always tried to do the utmost in her power for the comfort of the lonely old hermit. By his dumb daughter he meant a grand old oak tree that grew near his hut and sheltered it from storm and hung its branches over him so lovingly that the man grew to feel it was like a dear friend to him. There were many birds in the branches to whom he gave food, and they, in return, gave him sweet songs. Many times the woodmen had tried to cut this strong tree down, but father Bernardo prayed for its life, and it was spared to him.

At last there came a terrible winter, the storms were so severe that few houses and huts remained, and the reeds that rushed down the hills swept off all the tempests had left. At last, after a dreadful storm, Mary and her father went, with fear, to see if the hermit was still alive, for they thought he must have perished, but when they came to him they found that his dumb daughter had saved his life. On the coming of the reeds, he had gone up to the roof of his hut, but he soon saw that he was not safe there; then, as he cast his eyes to heaven, the branches of the oak seemed to bend toward him; and when he came up to them, so he took a few crusts of bread and climbed into the tree, where he staid three days. Below, everything was swept away, but the oak stood firm, and at last, when the sun came out and the storm was ended, his other daughter came to take him to her own house and make him warm and give him food, this dreadful time of hunger and cold had almost worn him out.

Then the good Father Bernardo fled on heaven to bless his two good daughters who had saved his life, and said that in some way they might distinguished together. Years passed, and the old hermit died. Mary married, and became the mother of little boys; the old oak tree had been cut down and made into winks. One day, as Mary sat in the door, and her children with her—she did the youngest to her breast, and the older one ran around in merry play, she called to mind the old hermit, all the blessings he had asked for, and she wondered if his prayers would not be answered in these children. Just then the little boy ran to mother with a stick to which he fastened a cross, and at that moment a young man came near. He large, dreamy eyes, and a restless, weary look. And weary he was, for thought of a lovely picture was in mind, but not clear enough in form enable him to paint it. It was Rinaldo Sanzio d'Urbino, and when his eyes fell upon the lovely, living picture of Mary and her children, he, in flesh and blood before him, the lovely dream that had floated his thoughts. But he had only a dell! On what could he draw? then his eye fell on the smooth face of the wine-cask standing near.

Hence my change of situation and departure from following music as a profession. Commercial engagements now absorbed my mind, and the interests of my firm (Chapman & Co., Cornhill, London) demanded all the time in recent times of the manner in which cholera, abdominal typhus, yellow fever, and the plague are spread, has convinced many that the diseases, also, which were formerly considered as communicable and are actually communicated by human intercourse and trade, are still in some way connected with it, although the nature of the connection is yet to be found out. The explanation of the frequent, sharply defined local imitations of cholera and typhoid has been sought first, in influences not of soil but of water and air, to which the germs of disease have been impartial examination of the local prevalence of these diseases in circles of greater or lesser extent have furnished evidence that in many cases air and water can no longer be maintained to the causes of the localization, but that the sources of the epidemic must be sought in the soil.

In the occurrence of cholera on ships at sea, where any influence of soil would seem to be absolutely out of the question, that influence often makes itself apparent in a striking manner by the fact that only persons who have come from certain places are attacked, while other persons on the ships do not even have a diarrhoea, although they are all the time with the sick, and use the same food and water and air. Ships at sea may be considered as in themselves safe from cholera; usually sickness brought upon them in individual cases die out; and it is regarded in seafaring practice as an excellent prophylactic measure to go to sea, taking the sick along and breaking up all communication of the men with the infected part or shore. Exceptional cases of epidemics breaking out on ships cannot be regarded as arising from contagion from person to person, but always from previous communication of the ship or its crew or passengers with some place infected with the disease.—*Popular Science Monthly.*

ALEXANDER STEPHENS says it took him ten years to learn that nine men out of ten who want the favor of a small loan have no intention of repaying it until they want a larger one.

The dealer laughed contemptuously, but the beauteous, unrolling the package, showed a \$100 bill laid between the double piece of paper which contained the dust.

The dealer looked very cheap, but the Chinaman never moved a muscle. He acted as if it was the regular thing to keep a \$100 greenback folded up in his gold dust packages.

THE COLORADO DESERT.

and thus I became the prolific ballad writer I have been. During my sojourn in Plymouth I wrote "Would I were with Thee!" Mrs. Norton; "The Widower," and "We Parted in Silence," by Mrs. Abby, "Sing to me, Nora!" Mrs. Crawford; "The Widow to her Child," Thomas Blake; all of them re-published in this country, but affording me no compensation whatever, and in only one single instance have I received remuneration for my writings here, although a resident and naturalized citizen of America upwards of 30 years. "Kathleen Mavourneen" has over 30 different editions published in the United States, from the sale of which I received not a cent. So much for the want of an international copyright law. Was this equitable and justifiable in law at this present time, I could once more resume my rightful position, "a prosperous gentleman." As it is, my necessities compelled me to labor as a common mechanic for a beggarly stipend of less than a dollar a day; two thirds of the time out of employment; with this fruitful remunerative return I have to maintain a wife and five children.

How the Aurora is Formed.

In a recent lecture by Professor W. Grylls Adams, recently published, the following theory is propounded to account for the observed interrelation of earth currents, magnetic storms, aurora and sun spots. Professor Adams assumes the sun to be a magnet, and infers that changes in his magnetism affect the magnetism of the earth. Further, the sun and moon, by dragging the atmosphere toward them as the earth revolves, may cause that friction between air and earth, and also that evaporation, which together may generate the supply of positive electricity in the air and negative in the earth. "Again," he says, "these tides in the atmosphere will cause the mass of it to lag behind the revolving solid earth, and at a height of thirty or forty miles we have a layer of air which, when stepped on, breaks and lets one sink ankle-deep into soil as soft and fine as powder. Picture a gale of wind blowing over the waste, the air filled with fine particles of sand, the sun obscured, and no objects visible 100 feet away, and you will have formed a faint idea of the worst aspect of the desert. But it is hard to imagine anything so fearful as the reality; unless one can see the ground and feel the sand and experience a heat of 120 degrees in the sun one can have only a poor conception of the desert." ■

KATHLEEN MAVORNEEN.

Mr. F. Nicholls Crouch, of Baltimore, writes as follows: The ballad "Kathleen Mavourneen," which ushered a once prosperous gentleman into notoriety in the world, was a simple portraiture of a man's feelings actuated by the devotion expressed in the lyrics of the song referred to. I read those words, and, "in my mind's eye," saw the scene before me—the situation, cause and effect. It was an untrammelled outpouring of a man's soul at the shrine of her whom nature had created his own. There was no necessity for grandiloquent thought, no occasion for dramatic display of action, no acquirement of obtrusive harmonies, to make the subject at once the adopted offspring of the public.

Under these impressions, on horseback on the banks of the Tamar, in Devonshire, I wrote the melody and became so infatuated with my own creation that I determined to personate the hero of the song before a Plymouth audience, although at that time commercially connected with a firm in London, and representing its interests abroad, previous to which I had figured in the concert rooms and theatres of the metropolis as a player and soloist on the violincello, commencing at the age of nine years. But, devoted as I was to my profession, the birthright of my family, I found as I advanced in life little of emolument was made by the labor of love I attached to it. Like other aspirants in life's lottery, I had taken to myself a wife, and children were fast gathering around me.

Hence my change of situation and departure from following music as a profession. Commercial engagements now absorbed my mind, and the interests of my firm (Chapman & Co., Cornhill, London) demanded all the time in recent times of the manner in which cholera, abdominal typhus, yellow fever, and the plague are spread, has convinced many that the diseases, also, which were formerly considered as communicable and are actually communicated by human intercourse and trade, are still in some way connected with it, although the nature of the connection is yet to be found out. The explanation of the frequent, sharply defined local imitations of cholera and typhoid has been sought first, in influences not of soil but of water and air, to which the germs of disease have been impartial examination of the local prevalence of these diseases in circles of greater or lesser extent have furnished evidence that in many cases air and water can no longer be maintained to the causes of the localization, but that the sources of the epidemic must be sought in the soil.

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HOW EASTERN BANKS ARE MANAGED.

The disclosures in a number of banks recently show what sort of frauds are put into the Boards of Directors by the keen and subtle Presidents who operate the banks. The directors in a good many cases have from \$2 to \$5 put on their plates as lunch when they have a directors' meeting once or twice a week. That is about all most of them care for. They don't know anything about the clerks in the banks, never inquire whether their salaries are sufficient to keep them honest, and in some cases it would seem that the synonym for a bank director was an old dotard of youthful imbecility. The clerks in the banks hardly ever get as much as \$2,000 a year, though \$100,000 a day passes through their hands. Bank meetings are composed of about five directors in general, that making a quorum where there are nine directors. They are apt to be from 60 to 70 years of age each. The cashier reads his weekly statement of the loans, discounts, deposits, cash, and stuff on hand. The old directors pass it to one another, peer over it, sniff over it, sleep over it, muffle, feel of the coin they just put in their pockets, and perhaps one old, keen man, who has a reputation for excessive brightness, will object to some discount, saying, for instance: "Smith gets too much. He had better overhaul Smith after this." They never count the cash and check the securities off, as they ought to do. Once a month the Government Inspector comes in; but he is a keen cuss, and generally sends word ahead to be ready for him and have his plate and pie of coin kept warm. They have a gilt-edged paper prepared for him, and generally send him to the theatre and make it comfortable for him. When five or six banks smash up in different places the Inspectors become regular as a clock for about two months. They hardly ever count the money. The bills are all hundreds, and the young man from the Government keeps them in a learned way, as if he knew just when a hundred dollar bill was missing. Bank clerks who are the most worthless always get the most family support to put up security for them. Many of the banks are kept poor fostering family associations. Sometimes the clerks are expected to take a little stock in the bank. The bank directors borrow more money in the course of a year from it than twice their number of the best customers. Of course the cashier gets a grip on the directors to whom he lends so much, and has no trouble in controlling them. It is said there ought to be a clause in bank charters prohibiting the corporations from borrowing from their own banks.

How the French and English Travel.

If you are traveling at night, with French fellow-travelers, the difference between English and French people will show considerably. The Frenchman will put on a soft silk cap, he will tie a handkerchief round his neck, he will tie a scarf over his head and under his chin in order to be secure from the draughts, he will take off his boots and produce an old pair of slippers from his bag, and he will dispose himself for sleep, carefully covering himself with rugs. The French woman will be equally prudent. She will put on a loose long jacket, of pretty material and pretty make, you may be, and under this she can afford to loosen the tight dress-bodice that fashion requires. She will produce an elegant pair of slippers, matching the jacket, and will snuff her head and shoulders in a dainty woolen fichu, of the same color as jacket and slipper. In the early morning, when day light is breaking over the silent land, and bursting its streaks into the carriage, the French travelers refresh themselves with an informal toilet. The lady pours some eau de rose or eau de lavande into a tin cup and with the corner of a small towel, brought on purpose in the handbag, wipes her face diligently. With her brush and comb she arranges her hair, and she adjusts her hat or bonnet, packs up her long jacket and slippers, etc., and is finally taut and trim when, at the next station, it is announced that cafe au lait is served at the buffet, and that the train will stop for 20 minutes.

We English more often tumble out of the railway carriage in a condition that would lead one to think we had passed the night in an Irish cabin. The English travelers disdain the precautions to which the French travel, the conductor behind the curtain, the platform, the latrine and bay of the dramatic stage. She made her debut several years ago, in a feminine character, upon the boards of a New York theatre, but the critics wrote her down with unsparing pens and after she had taken the truly feminine revenge of appearing before the curtain and telling in plain English her opinion of them and their criticisms, were more venomous than ever. For a woman to assume a man's part is generally looked upon as a dangerous experiment, and many of Miss Dickinson's friends felt that after her success in her initial venture in her proper sex, it was extremely hazardous to attempt the more difficult and ambitious task of impersonating male characters. Eminency would not be tolerated; and her own individuality is so intense that it was feared it would be Anna Dickinson spouting Shakespeare, not the noble Hamlet with "method in his madness."

On the evening in question the Opera House was packed from footlights to ceiling, in despite of extremely unpleasant weather. As "Hamlet" came forward a murmur of applause rippled through the audience, then every ear attended the opening lines, which were spoken tremulously, almost falteringly, but she almost instantly regained composure, and gave the first soliloquy:

"O that this too, too solid flesh would melt, Thaw, and resolve itself into a dew,"

with vigor and ease. As the scene progressed, it became evident that Miss Dickinson had not overestimated her own powers in attempting one of the most exacting and powerful creations of the immortal bard, and as the curtain fell, enthusiastic applause summoned her before the audience to bow her acknowledgments. It was noticeable that Miss Dickinson appeared best in the scenes in which she had the stage most nearly to herself, probably owing to the fact that this was her third or fourth appearance, and a little uncertainty as to stage effects. She was best, perhaps, in Act III, Scene 2d, where in presence of the court of Denmark the king and queen find their own sin mirrored in the mimic tragedy enacted by the strolling players, tutored by Hamlet, who finds his suspicions confirmed by the alarm of the conscience-stricken king; and again in the closet scene with Queen Gertrude, in which she stabs Polonius and beheads the ghost of his father. A bit of fine acting that "brought down the house" occurred in the speaking of the reply to the question of King Claudius: "Where is Polonius?"

"In Heaven, send thither to see; if your messenger find him not there, seek him in the other place yourself!"

The tone and action were inimitable.

Miss Dickinson makes a very fine looking Hamlet. She has a strong, masculine face, with a massive jaw which gives an appearance of heaviness in her face too pronounced to be beautiful in a woman.

In the purple doublet and cloak, with rapier by her side, there is no suggestion of effeminacy in her appearance. Her voice, though unusually deep for a woman, is the most suggestive of her sex

Veterinary Department

Conducted by Prof. Robert Jennings, late of Philadelphia, Pa., author of "The Horse and the Diseases," "Cattle and their Diseases," "Sheep, Swine and Poultry," "Horse Training Made Easy," etc. Professional advice through the columns of this journal to regular subscribers free. Particular information and reports to be sent to the full name and address to the office of the FARMER. No questions will be answered by mail unless accompanied by a fee of 25c per question. All correspondence will be given the symptoms should be accurately described, how long standing, together with color and age of animal, and what treatment, if any, has been resorted to. Private address, 30 First Street Detroit.

Diarrhea in Sheep—Probably caused by Worms.

HOMER, Mich., Jan. 20, '82.
Veterinary Editor Michigan Farmer.

DEAR SIR.—Will you please reply to the following through the FARMER? I went into my sheep into the barn yard the 20th of Nov., kept them in there about one week, then turned them into a field half of which was wheat with oats in the other half simply wheat stubble. The ram was with the sheep being put into the flock of 35 ewes on the 13th of Nov. They run in this cold day times for about three weeks, feeding only a little on the wheat and oats, they were then put into the yard for the winter, where they have remained ever since. About the 10th of Dec. I noticed that the buck was troubled with the diarrhea. I did nothing for about a week, then gave him two doses daily, morning and evening, of a solution of powdered chalk, powdered opium, powdered ginger in a half pint of peppermint water. This did no good; then I gave several doses of rhubarb, physicing him only a little; then followed this with the chalk, opium, etc., putting in some gentian and more rhubarb than at first. I gave him the solution from two to three tablespoonsfuls at a dose. I afterwards substituted the astringent and gave three or four doses daily of camphor, laudanum and gin for two days. Through all of this he has continued to fall off in flesh; his appetite has been poor all along; yesterday I gave him four doses of rhubarb, to-day I am giving him scalped milk and black pepper and intend to follow this up for two or three days. I have kept him from the other sheep since I commenced doctoring him; I have been feeding him clover and timothy hay mixed, of good quality; occasionally he will eat a gill of oats, but I give him an opportunity twice a day to eat some feed, such as oats, ground corn, oats, and burnt flour with them occasionally. His appetite varies, being better at times, though never good; I turn him out for two, three or four hours on Saturday evening after the arrest was made. There is something rotten in this case or appearance are deceiving.

Scirrhous Cord in a Horse.

LEONI, Jan. 25, '82.
Veterinary Editor Michigan Farmer.

DEAR SIR.—I write to you to ascertain if possible if there is relief aside from death for a favorite horse. He is a roan gelding 10 years old, and has been ailing since castration at 2 years, having never healed and produced I am told a scirrhus cord or chondroma of which I am ignorant. He is failing in general health, action, and the tumor (for such I term it), is increasing rapidly and discharging, while his limbs are swelling and do not go through plenty of exercise. I am told I can have another operation and my horse be able to labor for years; but I am afraid it has already affected him to that extent that it would hasten his death. Would you advise operation if so, which would be the best method, clamping or to remove it with a scissor, or had I better wait until spring or it has done at once? My stables are warm, of course, using tonics and good care; the reason I have never had him operated upon was because I never believed it would or could benefit him. If by my imperfect description you can aid me in the treatment of my horse through your columns, it will be greatly read. Yours truly, E. G. M.

Answer.—If the vitality of your horse is sufficiently strong to bear the shock of another operation, his life may not only be saved, but he may become a useful animal for several years to come. It should not have been neglected so long. Secure the services of a veterinary surgeon who uses the *coronavirus*, the only instrument suitable for the purposes; clamping, searing, and tying, should no longer be tolerated. You will gain nothing by waiting until spring; but have the operation done at once as the only chance of saving the animal's life. Give him moderate exercise the following day, giving nourishing food and good grooming.

SCRATCHES.

BROOKPORT, Mich., Jan. 23, 1882.
Veterinary Editor Michigan Farmer.

Will you please inform me through the columns of your paper, if you can, what ails my horse? I have an iron grey gelding five years old, who lifts his feet up, raises them nearly as high as his body when I go in the stall and make him stand over, and when he is hitched and stands a long time, and acts as if it hurt him some, where in his gambrel joints. He does not go stiff in his legs, or lame; has been about a year, has never done anything for him. I cannot tell whether it is in his legs or hips; he seems well and hearty in other ways, and has never been lame.

Yours truly, SUBSCRIBER.

SPRING OR STRING-HALT.

PARKS, Mich., Jan. 18, 1882.
Veterinary Editor Michigan Farmer.

Will you please inform me through the columns of your paper, if you can, what ails my horse? I have an iron grey gelding five years old, who lifts his feet up, raises them nearly as high as his body when I go in the stall and make him stand over, and when he is hitched and stands a long time, and acts as if it hurt him some, where in his gambrel joints. He does not go stiff in his legs, or lame; has been about a year, has never done anything for him. I cannot tell whether it is in his legs or hips; he seems well and hearty in other ways, and has never been lame.

Yours truly, SUBSCRIBER.

ANSWER.—From your description, we are inclined to believe the trouble with your horse to be string or spring halt, as it is called. It consists in a sudden spasmoid raising of the hind legs. The cause of this disease has never been satisfactorily defined by veterinary writers. In many instances, where the diseased limb has been dissected after death, no morbid changes in the several tissues of the leg have been discovered to account for this peculiar affection. We have, however, on several occasions where the disease existed during life, found upon dissecting the hock joint after death, a little roughness, caused by long deposits on the inner portion of the osseous, or bone forming the cap of the hock joint, where the peroneus tendon (ham string) plays over it, and in two instances we found the tendon almost entirely surrounded by bony structure, thus interfering with its free action. This bony deposit sufficiently accounts for the peculiar action of the leg when in motion. In the absence of these deposits it is difficult to explain the cause. One writer considers it due to muscular contraction; another to some morbid condition of the motor nerves, etc. No treatment that we can suggest would be of any service to your animal; it is therefore better to let Nature take her course than to spend money in the vain hope of relief. We have known several spontaneous cures of this disease by some effort of Nature; but have never known in a single instance any benefit from medical or surgical treatment.

SPRAINED HOCK IN A FILLY.

PAW PAW, Jan. 18, 1882.
Veterinary Editor Michigan Farmer.

Being a subscriber of the FARMER I want the benefit of your advice. I have a filly colt four months old that was playing and slipped the 10th of this month, both legs out straight behind. It snapped as if she had broken her leg; right off her gamrel joint swelled on left leg as large again as the other; was a little lame a couple of days at first; is not now, but the bunch is there and is soft, so that it can be pushed back and forth through the joint; have used salt and vinegar on it; am now using a liniment I got of a horse doctor here, but the swelling don't go away. Would like your opinion, and oblige J. E. A.

ANSWER.—The injury to your colt's leg will require careful attention in treating the case, in order to prevent permanent enlargement of the hock joint. The injury being recent and the animal young is favorable to a permanent cure. Give the animal rest and apply two or three times a day the following lotion: Take sulphate of zinc, one ounce; sub-acetate of lead, one ounce; alum pulverized, two ounces; soft water, one gallon; mix all together and apply two or three times a day with a soft sponge.

THE ANONYMOUS COMMUNICATIONS OF E. M. AND C. D. WILL BE ANSWERED AS THEY COME, IF SUBSCRIBED TO THE MICHIGAN FARMER.—VET. ED.

IMPORTANT TO TRAVELERS.—Special documents are offered you by the Burlington route. It will pay you to read their advertisement to be found elsewhere in this issue.

DANBY, Jan. 20, 1882.
Veterinary Editor Michigan Farmer.

DEAR SIR.—Being a subscriber to the FARMER I wish treatment for a horse having been blistered over the kidneys, removing hair as large as two hands, leaving a large raw sore, which has healed except a small spot. Is swollen yet some across the back. The sorest spot is in the coupling; sore and stiff all over; stands as square as any horse; lays down nights; puls natural or nearly so; eats well; color brown; age eight years; owned him one week; do not know former treatment, except having been driven and drawn hard a short time back; cause of blister stoppage of water about two months ago. My treatment: Entire rest, feed bran mash

three times daily with corn fodder; not knowing former treatment, shall give one pint linseed oil followed by extract Bellapointa one-half drams; opium two drams, three times daily until I receive your advice. Question: Do you think he will make a good all-work horse in the near future. Respectfully yours,

A. W. BISSELL.

ANSWER.—Your description throws no light upon the nature of the trouble with your horse. To blister a horse over the loins for stoppage of the water is bad practice. The application we would judge was of a caustic nature. The soreness and stiffness you speak of may be rheumatic, or it may be from various other causes. We fail to diagnose the case from the meagre description you have given to guide us. In reference to your proposed treatment, we do not understand why you would give linseed oil, and then belladonna and opium. Under the circumstances we can only advise you in the treatment of the granulated sore, from the severe blistering. Take one drachm sulphate of zinc, dissolve in half a pint of water, then add six ounces of glycerine. First wash the sore with Castile soap and water, then apply the liquid to the part at least once a day. Equal parts of tinct. aloes and myrrh to two parts of water will answer the purpose.

COL. BEARD will deliver his new lecture entitled "Humorous Side of the War" at South Lyons, on Friday evening next. The Colonel is an eloquent speaker, and all who attend the lecture will be fully repaid for their time and money.

TUESDAY last James Minock, a farmer living in Redford, killed an old man named James Carr, who had been living with him. Minock claims that Carr had stolen some money from him, which he had put between the mattress of his bed for safe keeping, and that when he accused him of the theft and attempted to get possession of the money, Carr attacked him with a knife, and that in self-defense he stabbed Carr with a butcher knife. Minock is at present confined in the Wayne County jail.

MONDAY morning Doctor Hollywood wen before Justice Miner, and asked for a warrant against Dr. Cox and Mrs. Schneider in the Martha Whitham case, he was questioned as to his knowledge of the case, and knew so little of it that the justice refused a warrant and the prisoners were discharged. It is now in order for Supt. Rogers to qualify his statements made to the reporters of the daily press on Saturday evening after the arrest was made. There is something rotten in this case or appearance are deceiving.

THE past week has apparently been a bad one for evil-doers in Detroit. In the Lyons-Lewis case the tables were turned on the virtuous Sophie, and she with her notorious partner, Bob McKinney, found themselves behind the bars of the jail on Saturday, while Mrs. Lewis is still enjoying her liberty and three square meals a day at the Standish House. In the Peoples case, Dr. Cox and Mrs. Schneider were arrested for the murder of Martha Whitham, and if the word of Supt. Rogers is worth anything, the prospect of convicting them is not a matter of doubt. The only thing surprising about the affair is that the ex-convict Dr. Hollywood is the complaining witness.

WOMEN are everywhere using and recommending Parker's Ginger Tonic, because they have learned from experience that it speedily overcomes despondency, indigestion, pain or weakness in the back and kidneys, and other troubles peculiar to the sex.—*Home Journal* See ad.

HOUSES of ladies have found sudden relief from all their woes by the use of Lydia E. Pinkham's Vegetable Compound, the great remedy for diseases peculiar to females. Give it to your maidens to keep them in good health, and to your sons to keep them in good spirits.

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